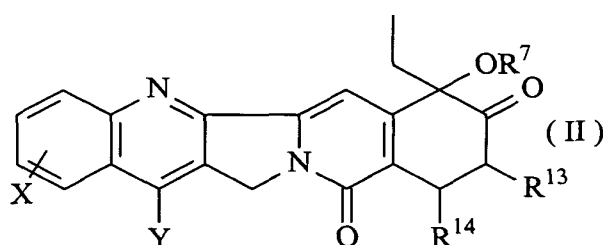
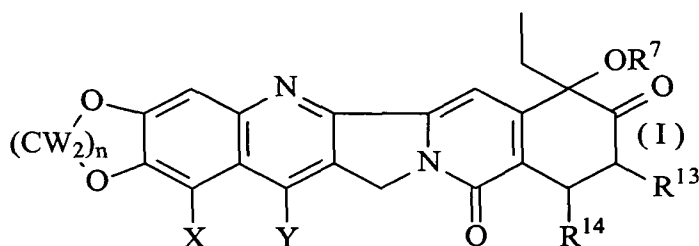


WHAT IS CLAIMED AS NEW AND DESIRED TO BE SECURED BY LETTERS  
PATENT OF THE UNITED STATES IS:

1. A camptothecin analog having the structure:



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where

X and Y are each independently NO<sub>2</sub>, NH<sub>2</sub>, H, F, Cl, Br, I, COOH, OH, O-C<sub>1-6</sub> alkyl, SH, S-C<sub>1-6</sub> alkyl, CN, NH-C<sub>1-6</sub> alkyl, N(C<sub>1-6</sub> alkyl)<sub>2</sub>, CHO, C<sub>1-8</sub> alkyl, N<sub>3</sub>,

10 -Z-(CH<sub>2</sub>)<sub>a</sub>-N-((CH<sub>2</sub>)<sub>b</sub>OH)<sub>2</sub>, wherein Z is selected from the group consisting of O, NH and S, and a and b are each independently an integer of 2 or 3,

-Z-(CH<sub>2</sub>)<sub>a</sub>-N-(C<sub>1-6</sub> alkyl)<sub>2</sub> wherein Z is selected from the group consisting of O, NH and S, and a is an integer of 2 or 3,

15 -CH<sub>2</sub>-L, where L is halogen (F, Cl, Br, I), <sup>+</sup>N<sub>2</sub>, <sup>+</sup>(OR<sup>1</sup>)<sub>2</sub>, <sup>+</sup>S(R<sup>1</sup>)<sub>2</sub>, <sup>+</sup>N(R<sup>1</sup>)<sub>3</sub>, OC(O)R<sup>1</sup>, OSO<sub>2</sub>R<sup>1</sup>, OSO<sub>2</sub>CF<sub>3</sub>, OSO<sub>2</sub>C<sub>4</sub>F<sub>9</sub>, C<sub>1-6</sub> alkyl-C(=O)-, C<sub>4-18</sub> aryl-C(=O)-, C<sub>1-6</sub> alkyl-SO<sub>2</sub>-, perfluoro C<sub>1-6</sub> alkyl-SO<sub>2</sub>- or C<sub>4-18</sub> aryl-SO<sub>2</sub>-, (where each R<sup>1</sup> independently is C<sub>1-6</sub> alkyl, C<sub>4-18</sub> aryl or C<sub>4-18</sub> ArC<sub>1-6</sub> alkyl); or

20 -CH<sub>2</sub>NR<sup>2</sup>R<sup>3</sup>, where (a) R<sup>2</sup> and R<sup>3</sup> are, independently, hydrogen, C<sub>1-6</sub> alkyl, C<sub>3-7</sub> cycloalkyl, C<sub>3-7</sub> cycloalkyl C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, hydroxy C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy C<sub>1-6</sub> COR<sup>4</sup> where R<sup>4</sup> is hydrogen, C<sub>1-6</sub> alkyl, perhalo C<sub>1-6</sub> alkyl, C<sub>3-7</sub> cycloalkyl, C<sub>3-7</sub> cycloalkyl-C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, hydroxyl-C<sub>1-6</sub> alkyl, C<sub>1-6</sub>-alkoxy, or C<sub>1-6</sub> alkoxy-C<sub>1-6</sub> alkyl, or (b) R<sup>2</sup> and R<sup>3</sup> taken together with the nitrogen atom to which they are attached form a saturated 3-7

membered heterocyclic ring which may contain a O, S or NR<sup>5</sup> group, where R<sup>5</sup> is hydrogen, C<sub>1-6</sub> alkyl, perhalo-C<sub>1-6</sub> alkyl, aryl, aryl substituted with one or more groups selected from the group consisting of C<sub>1-6</sub> alkyl, halogen, nitro, amino, C<sub>1-6</sub> alkylamino, perhalo-C<sub>1-6</sub> alkyl, hydroxyl-C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkoxy-C<sub>1-6</sub> alkyl and -COR<sup>6</sup> where R<sup>6</sup> is hydrogen, C<sub>1-6</sub> alkyl perhalo-C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, aryl, and aryl substituted with one or more C<sub>1-6</sub> alkyl, perhalo-C<sub>1-6</sub> alkyl, hydroxyl-C<sub>1-6</sub> alkyl, or C<sub>1-6</sub> alkoxy-C<sub>1-6</sub> alkyl groups;

R<sup>7</sup> is H, or C(O)-(CH<sub>2</sub>)<sub>m</sub>-NR<sup>8</sup>R<sup>9</sup>, where m is an integer of 1-6 or -C(O)CHR<sup>10</sup>NR<sup>8</sup>R<sup>9</sup>, where R<sup>10</sup> is the side chain of one of the naturally occurring α-amino acids, R<sup>8</sup> and R<sup>9</sup> are, independently, hydrogen, C<sub>1-8</sub> alkyl or -C(O)CHR<sup>11</sup>NR<sup>12</sup>R<sup>13</sup> where R<sup>11</sup> is the side chain of one of the naturally occurring α-amino acids and R<sup>12</sup> and R<sup>13</sup> are each independently hydrogen or C<sub>1-8</sub> alkyl;

W is independently H or F,

R<sup>13</sup> and R<sup>14</sup> are each H or combine to form a double bond;

and

n is an integer of 1 or 2,

and salts thereof.

2. The camptothecin analog of claim 1, wherein n is 1.

3. The camptothecin analog of claim 1, wherein Y is -CH<sub>2</sub>-L.

4. The camptothecin analog of claim 1, wherein L is selected from the group consisting of Cl, Br and I.

5. The camptothecin analog of claim 1, wherein R<sup>7</sup> is C(O)-(CH<sub>2</sub>)<sub>m</sub>-NR<sup>8</sup>R<sup>9</sup>, where m is an integer of 1-6 or -C(O)CHR<sup>10</sup>NR<sup>8</sup>R<sup>9</sup>, where R<sup>10</sup> is the side chain of one of the naturally occurring α-amino acids, R<sup>8</sup> and R<sup>9</sup> are, independently, hydrogen, C<sub>1-8</sub> alkyl or -C(O)CHR<sup>11</sup>NR<sup>12</sup>R<sup>13</sup>, where R<sup>11</sup> is the side chain of one of the naturally occurring α-amino acids and R<sup>12</sup> and R<sup>13</sup> are each independently hydrogen or C<sub>1-8</sub> alkyl.

6. The camptothecin analog of claim 1, which is selected from the group consisting of R isomers, S isomers and mixtures thereof.

7. The camptothecin analog of claim 6, wherein the analog is the S isomer.

8. The camptothecin analog of claim 6, wherein the analog is the R isomer.

9. The camptothecin analog of claim 6, wherein the analog is an S rich mixture of S and R isomers.

10. The camptothecin analog of claim 6, wherein the analog is a R rich mixture of S and R isomers.

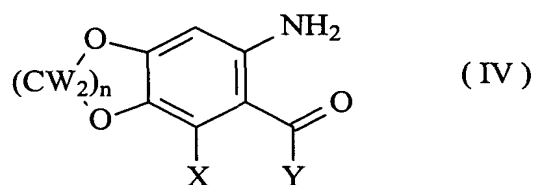
11. The camptothecin analog of claim 6, wherein the analog is a racemic mixture of R and S isomers.

12. A method of treating leukemia or solid tumors comprising administering to a patient in need thereof, the camptothecin analog of claim 1.

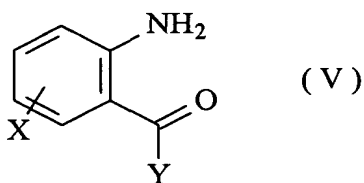
5 13. A pharmaceutical composition comprising the camptothecin analog of claim 1.

14. A method for inhibiting the enzyme topoisomerase I, comprising contacting a DNA-topoisomerase I complex with the camptothecin analog of claim 1.

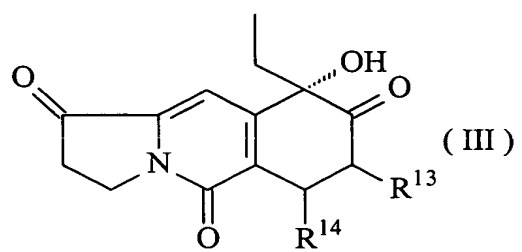
15. A method of preparing the camptothecin analog according to claim comprising: condensing a compound of formula IV or V



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where X, Y, W and n are as defined in claim 1,  
with a tricyclic ketone of formula III



where  $R^{13}$  and  $R^{14}$  are as defined in claim 1  
to form the camptothecin analog of claim 1.